# Before the Federal Communications Commission Washington, D.C.

In the Matter of Docket WT 08-165

CTIA Petition for Declaratory Ruling to
Clarify Provisions of Section 332(c)(7)(B) |
to Ensure Timely Siting Review and to
Preempt under Section 253 State and Local |
Ordinances that Classify All Wireless Siting |
Proposals as Requiring a Variance

Comments of Broadcast Signal Lab, LLP

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To the Federal Communications Commission,

## **INTRODUCTION**

Broadcast Signal Lab, LLP is a Massachusetts-based business that provides radio communications engineering and consultation services in the land-mobile and broadcast communications fields. As a managing partner of the company, the author of this comment, David P. Maxson personally has participated in hundreds of wireless facility siting processes and hearings in municipalities and with other governmental entities. My services in the personal wireless communications arena at present are largely to municipalities that are a.) reviewing permit applications for new or changed wireless facilities, b.) developing Requests for Proposals ("RFPs") for wireless services to lease municipal land or structures for the provision of personal wireless services, c.) modifying local ordinances to improve both the impact of personal wireless facilities and the compliance of the municipality with the wireless facility siting provisions of the personal wireless services rules, and d.) assisting municipalities that have been sued based on the effective prohibition of personal wireless services clause of the US Code. My work in the personal wireless services field also includes consulting with developers of wireless facilities as well as with citizens and citizens' groups in wireless facility siting matters.

As an independent expert on the placement of personal wireless service facilities, I have observed and participated in numerous wireless facility siting proceedings over the past 20 years. I have seen the challenges that both sides – municipalities and industry – have faced in the regulation and placement of personal wireless facilities. In this comment on the CTIA Petition for Declaratory Ruling, WT Docket 08-165, ("Petition") I rely on my extensive experience to illuminate the record.

In summary, I support clarification of the issues relating to what service providers are eligible for consideration of prohibition of service claims in a specific geographic gap, with a qualification that the clarification should be carefully worded to incorporate

known variations on the question as discussed herein. I suggest that resolution of the ambiguity of the "failure to act" wording in Section 332(c)(7)(B) should not be with quantitative time limits, but if resolved in this proceeding at all, it should only be with qualitative criteria describing the Commission's expectation that municipalities move forward deliberately and without intentional delay for the sake of delay. I caution that granting collocation applications preference over others is not prudent, as there is no true distinction between collocation applications and other applications for wireless facilities, because collocation is not necessarily a simple, nor a preferred, proposition in all cases. I further caution that creating a limitation on ordinances that require variances is not reasonable, practicable, or consistent based on the variety of ways variances are implemented in the 50 states, on the fact that courts have already told municipalities to grant them when a prohibition of service would otherwise result (and municipalities regularly do so), on the use of the variance as one of several tiers in land use regulation that is designed to encourage preferred outcomes whenever possible which would be eviscerated by a preemption of certain variances, and on the fact that the definition of an ordinance that "automatically" requires variances is not cut-and-dried, but rather a subjective distinction, as evidenced by the examples given by the Petition.

Finally, I disagree with the position taken in the Petition that the wireless industry's ability to deploy its networks promptly is severely hampered by local zoning activity. Wireless facility deployment beginning in 1995 with the issuance of the first PCS licenses has proceeded at a rapid pace, resulting in licensees who achieved their tenyear coverage goals in less than two years, and providing wireless service today to hundreds of millions of subscribers in the United States.

## CLARIFICATION OF THE IS-ONE-PROVIDER-ENOUGH QUESTION

I first address the Petition's request to clarify the "one provider is enough" interpretation that is sometimes applied in municipal zoning decisions.<sup>1</sup> This question indeed often surfaces in public hearings. Clarification by the Commission would reduce uncertainty for all parties. We take no position on how this should be interpreted. However, if the Commission were to rule in favor of the multiple-providers-are-

<sup>&</sup>lt;sup>1</sup> CTIA Petition for Declaratory Ruling, July 11, 2008, Sec. V, p. 30 et seq.

protected-in-the-same-area interpretation, I suggest that wording of such a clarification be carefully constructed. The Petition suggests that the Commission "declare that the fact that one or more other carriers serve a given geographic market is not by itself a sufficient defense against a suit brought under Section 332(c)(7)(B)(i)(II) [of the US Code]."<sup>2</sup> The concerns I have are three.

First, from a local regulation perspective, the question does not relate to whether "other carriers serve a given geographic *market*" and instead relates to whether other carrier(s) are successfully providing personal wireless services to an area within the community that the applicant personal wireless service provider is claiming is a gap in its service. The local land use board is not focused on whether the market has service from one or more carriers; rather, its interest is if the area targeted by a proposed facility already has service from another licensed wireless service provider, whether the one (or more) existing service(s) is enough or whether each service is entitled to provide service there.

This leads to my second concern about how a clarification would be worded. There are valid reasons for considering whether other personal wireless service providers are providing service to the purported gap. Municipalities are usually counseled to consider the impact of their decision under Section 332(c)(7)(B)(i)(II) by evaluating a proposed new wireless facility in terms of whether there is a "gap" in service and whether the proposed facility is the only way to serve that "gap" under local regulations. The question sometimes arises that if other personal wireless service providers do not appear to have difficulty serving the purported gap, why should a new facility be approved?

If there is evidence that one or more other personal wireless service providers is providing service where the present applicant claims to have a gap, the question is germane – why can't the new applicant obtain service by using facilities or siting strategies employed successfully by other wireless service providers in the area? Local review of wireless facility applications necessarily involves comparisons of the manner in which competing personal wireless service providers successfully provide their services in conformance with local land use regulations.

<sup>&</sup>lt;sup>2</sup> *Id.* p. 32

Based on the foregoing, if the Commission clarifies the rule by eliminating the one-provider-is-enough interpretation, it should be careful to preserve the locality's ability to compare how different services are achieving their coverage objectives to ensure that a viable solution, more palatable to the community and that is employed by other providers, is not being overlooked by the applicant. In short, if two or more providers offer functionally equivalent service, and one of those providers insists that the methods the other provider employs for siting wireless facilities to achieve coverage are not sufficient for its purposes, it remains a fair question to ask why not. There are sometimes good reasons, such as an antenna structure is "full," or a service at PCS frequencies may have insufficient coverage from a lower elevation at the same site as a competing service at a lower cellular frequencies and higher elevation on the antenna structure. The comparison with other service providers' performance is one of several ways to vet the claims made in an application and can lead to further fact finding to complete the public record.<sup>3</sup>

The third concern I have about the Petition's request for the clarification is in its lack of attention to the fact that individual service providers may be licensed to implement more than one service in a given market.<sup>4</sup> With industry consolidation and the acquisition of new licenses by incumbent personal wireless service providers, an applicant may already be providing wireless service to an area under another licensed service. The applicant may be applying for permission to add a second licensed service

<sup>&</sup>lt;sup>3</sup> For example, in a recent case in northern California in which I consulted, one provider was already providing service to a valley town from a ridge east of the town, yet a second provider wanted to build a new tower on the western ridge to achieve the same objective. After some analysis that showed how the coverage from the location of the first provider was substantially the same as that proposed from the new site of the second provider, the second provider was persuaded to collocate with the first provider. If a clarification by the Commission were not carefully worded to preserve such comparative analysis, municipalities would be denied a valuable opportunity to consider the coverage of other providers and to discover mutually beneficial solutions.

<sup>&</sup>lt;sup>4</sup> e.g. "...if it prohibits *the applicant* from providing wireless service in a given area." *Id*, p.30; and "barring action that would inhibit the provision of multiple "services" by *disparate providers*." p.32; and "preserves a carrier's right to make reasonable deployments, even if the area in question is already served by *another provider*." p.31 (emphasis added)

to a facility or to build a new facility for that service. Any ruling that inadvertently equates "applicant" with a single licensed service will create further ambiguity.

A personal wireless service provider adding a second licensed service to an existing facility may require more space on the ground or may choose to add more antennas to its existing array, or to change the existing antennas to some with a substantially larger form factor. These changes are often *de minimus* and are sometimes allowed by right or by cursory land use board review. In some circumstances, the proposed changes may materially affect the character of a wireless facility, prompting municipalities to consider alternatives. In order to consider whether the applicant's new licensed service proposed for an applicant's existing facility or facility site is protected under Section(c)(7)(B), and whether it therefore requires federally mandated review prior to making a decision, the context of the proposed new service must be clear. The personal wireless service provider may be adding bandwidth to an existing service by utilizing newly licensed spectrum in a new service band, in which case it may be capacity and not coverage that drives the proposal. Alternatively, the applicant may be offering a less than functionally-equivalent service on the new licensed service.<sup>5</sup> How does one then determine whether and how the addition of a new licensed service is subject to the preclusion of the prohibition of provision of service? What constitutes a gap in an already working service?

It is issues like the foregoing that sometimes perplex municipalities in their efforts to balance the benefits of enabling new wireless facilities against their detriments to the character of the community, which right to balance Section (c)(7)(A) expressly

<sup>&</sup>lt;sup>5</sup> We also note the ambiguity of the term "service." The definition of personal wireless services in Section(c)(7)(C)(i) identifies major categories of services, such as commercial mobile radio services, under which the Commission has identified specific licensed service bands as such services (e.g. personal communications service, broadband radio service, advanced wireless service, specialized mobile radio service). On the one hand, it seems sensible to equate a "personal wireless service" with such a licensed service defined by the Commission. On the other hand, to a subscriber, the service being offered is some type of wireless communications service that may be understood independently of the numerous frequency bands that are officially designated as services. This ambiguous use of the term "service" in the law and regulation makes it difficult at times to interpret some of the combinations of service providers, licensed services, subscription services, and facility sites that may appear in an application or at a site. Clarity on the meaning and use of the term "service" would benefit municipalities and industry alike. It would also help interpret the meaning of the term "functionally equivalent services" to which the antidiscrimination rule of Section (c)(7)(B)(i)(I) applies.

preserves.<sup>6</sup> To do the right thing, municipalities rely on the advice of counsel based on the past eight years of court interpretations, and often bring in independent experts in wireless facility siting to help inform the record with facts.<sup>7</sup>

In summary, if the Commission were to clarify the interpretation of whether each service provider is independently eligible to serve significant gaps in coverage under Section(c)(7)(B), we recommend that the clarification not preclude the right to consider how other providers are delivering service to the target area, that it be carefully worded in the context of significant gaps in service within the jurisdiction of the municipality, and that it anticipate in the wording of the clarification that interpretations will not only be based on a competing provider seeking to add service to an area already served by a competitor, but also to consider how it should apply, or not, to a multiple-licensee seeking to install a second licensed service facility to serve an area where it already provides another service.

## ARBITRARY DEADLINES

The law provides personal wireless service providers with a remedy in federal court, which it is required to hear "on an expedited basis." By imposing the Petition's requested arbitrary deadlines for land use boards to hear wireless facility applications, the Commission would be penalizing communities in what is today a largely working process. The Petition acknowledges that "many localities have embraced the importance of wireless services and adjusted to the new wireless siting paradigm..." and remonstrates that "In some areas, however, local authorities have refused to process

<sup>&</sup>lt;sup>6</sup> "General Authority - Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a state or local government or instrumentality thereof over decisions regarding the placement, construction and modification of personal wireless service facilities."

<sup>&</sup>lt;sup>7</sup> It is commonplace in land use regulation proceedings to engage the services of independent experts at the applicant's expense. In other land use applications it is typically a civil engineer that provides the independent expertise; in wireless matters the special knowledge of wireless siting experts and other specialists is relied upon.

<sup>&</sup>lt;sup>8</sup> Section (c)(7)(B)(v)

wireless siting applications expeditiously." The Petition is asking for a broad and draconian remedy to address the purportedly untenable actions of a few.

The Petition proffers some statistics that leave the mistaken impression that about one application in four has taken more than a year to process. The Petition states<sup>10</sup> that about 760 of 3300 pending wireless applications provided by participating contributors of data to the CTIA "have been pending final action for more than one year."

In my experience, there are many straightforward applications that do not rise to the level of requiring my services that local boards, familiar with wireless facility siting issues, handle in one or two meetings. Further, some wireless facility installations in some communities are permitted by right. In other words, they have a zoning permit application process time of 0 days because the applicant may apply directly for a building permit to construct the facility, and surely these have not been counted in the Petition's counts of applications. Among the application processes I participate in, some only require a cursory report from me confirming that i's are dotted and t's are crossed, and local boards readily approve; some involve two to four hearings in which the board wrestles with fact finding, seeking clarifications and alternatives analysis from the applicant. Each wireless facility siting application is unique, and varying greatly are the consequences to the community and complexity of the review.

Some applications reasonably take six months or longer. Those applications that have taken longer than one year in which I have participated have involved actions by both parties that combined to take the time. Among applicant-oriented delays I have been exposed to, wireless applicants may fight a board request for certain information, funds, or hearing procedure, which can cause delay; they may prepare their response to an inquiry last-minute and submit at the next meeting, allowing no time for the board or its professionals to digest the material prior to the meeting, and requiring a continuance; they may have scheduling conflicts that prevent them from attending the next available hearing date; the applicant's accounting process may be slow in providing the escrow funds for the independent expert; and so on.

<sup>&</sup>lt;sup>9</sup> Petition, pp.13-14 (emphasis added)

<sup>&</sup>lt;sup>10</sup> *Id.* p.15

Further the Petition does not define how it measures the length of an application process – specifically, what are the start and end of a "pending" application. Municipalities often receive permit application documents and start a state-mandated hearing-opening clock, review the application for completeness, request more materials before the submitted application is technically complete under clearly defined criteria, prepare required abutters lists, and/or publish public notices with a required delay between notice and meeting. Depending on the municipality and state, criteria such as these uniformly apply to all local permit applications, not just for wireless facilities, and can delay the first public hearing on the application by a month or more from tendering the application. Likewise, following the closing of the hearing, boards are typically mandated to make a decision within a certain amount of time, publish the decision within a certain time, and hold for a quiet period pending appeals to the decision before the carrier may consider the case closed. This may total as many as 90 days after the hearing closes. These pre- and post-hearing requirements apply to all land use applicants, adding to the minimum time required to process a permit application.

As applicants for other kinds of development can attest, the hearing of an application before a land use board is a deliberative process that plays no favorites, and takes varying amounts of time depending on the complexity of the land use issues. While some issues relating to the placement of wireless facilities are unique to such projects (e.g. siting based on coverage deficiencies), many land use issues relating to wireless facilities are no different than other land use applications (e.g. wetlands, dimensional requirements, access, safety, noise, visual character). Local zoning processes should apply to wireless facility siting as they do to other land use applicants, so long as a prohibition of the provision of personal wireless service is not the result.

The Petition's application duration statistics are un-scientific. In addition to the lack of a definition of what constitutes the beginning and end of a "pending" application, the Petition creates an incorrect impression when it suggests that of 3300 pending wireless applications with 760 in process for more than one year, the remainder of 2540 have been open less than a year. If we assume an average three-month turnaround of those applications of less than one year duration, then  $2540 \times 4 = 10{,}120 \times 4 = 10$ 

given point in time being older than one year, they represent less than ten percent of all applications opened in a year that are taking longer than a year to process. Further, the 3300 applications mentioned in the Petition are likely subject to a selection bias that also favors overstating the percentage of applications lasting more than one year.<sup>11</sup>

While some personal wireless service providers are frustrated by the fact that some applications processes take longer than others, such time frames cannot be implicitly explained by intransigence of the municipalities. Here are some examples that reveal the process is working and is a two-way street.

In a case in New Hampshire, it took an additional two months before the local land use board's application submission requirements were met by the wireless facility applicant. It is reasonable to request waivers of irrelevant application submission criteria; however, reasonable materials required by local regulation may be overlooked by applicants, causing the applicants self-imposed delays. An arbitrary deadline for hearing and deciding on permit applications will be difficult to adjudicate, because delays, continuances and deferments are not easily ascribed to a single party.

In a case in northeastern Massachusetts, I could tell that there was a likely coverage prediction error in the applicant's computer modeling from which it erroneously asserted it had a gap in reliable service along a coastal highway. Some technicians at wireless companies are not cognizant of the subtleties and variations in how their selected computer models work. In this case I verified by field measurement that the area that was defined by the applicant as a coverage gap in fact had service at the carrier's preferred signal levels because local terrain and vegetation was salt marsh, providing almost no impediment to the signals emanating from nearby facilities, despite the computer model's assumption to the contrary. Such analysis takes time to identify the need for, to approve, and to execute. Wireless companies do make mistakes because their facility-siting processes are essentially done by committee (accounting, marketing, RF engineering, real estate, and other departments have input into the selection of a proposed facility site). Group thinking can sometimes lead to irrational group

year proceedings with respect to the national base.

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<sup>&</sup>lt;sup>11</sup> The Petition is silent on its methodology. It may be a self selecting data set because only those carriers or carrier regions where there are concerns about delays may have submitted data. This would over-represent the national proportion of longer-than-one-

decisions.<sup>12</sup> A deliberative process of reviewing the application can trap poor proposals. A rush to judgment imposed by an arbitrary permitting deadline for all proceedings will encourage more mistakes to be overlooked during a hurried application process.

In a case in a densely populated residential town just north of Boston, the applicant asserted its computer model was accurate and that a gap in its desired coverage existed in a certain area. Under my supervision, an independent contractor performed a field survey of the coverage in and around the area claimed to be a gap. The results demonstrated that the applicant's purported gap was nonexistent. The application was withdrawn. It took several months of reasonable due process to get to that point.

A challenging yet cooperative application process lasting more than a year turned out successfully for both the tower company and an historic town near Worcester, Massachusetts. The proposed wireless tower at a proposed site in a residential area required a variance before permitting. In the due diligence process, an alternative site was identified that would have a substantially less objectionable impact on the community. The town and the applicant agreed to place the first application indefinitely open while the applicant pursued rights and permits for the second site. It took about 18 months between the submission of the first application and the time the publication and appeal window expired on a final decision approving the alternative site. In a coastal Massachusetts town, a similar process taking a similar length of time resulted in approval of a new tower at an alternate site that was mutually acceptable to the applicants and the town. Such processes are not uncommon, and time is necessary to achieve such successes.

In about half of the application proceedings upon which I consult, my participating in the hearing process begins only after a number of preliminary procedural steps must occur, which can take three months, more or less: the application is tendered and publicly noticed; at least one meeting is held to hear the applicant's presentation; the board decides to find, then select an expert to assist with the review; the application materials are sent to the expert for review prior to expert participation in the next meeting. The expert review often raises additional questions that require the applicant to

<sup>&</sup>lt;sup>12</sup> cf. Professor Jerry Harvey, ph.D., The Abilene Paradox, Jossey-Bass, 1988

prepare responses prior to another meeting. An arbitrary permitting deadline would shortcut this due process.

In one Pennsylvania community, the township administration was convinced in 2005 by wireless interests that the only way to improve wireless coverage in a residential area of the suburban community was to place a 165-foot tower and 2500 square feet of equipment compound on a small, 50-foot wide town-owned parcel at a dangerous intersection in a natural residential setting. At great expense to residents convinced that there were better ways to improve coverage, town officials were persuaded to halt the plan to change the zoning ordinance to permit the facility, and allowed the marketplace to develop an alternative. In 2008, a distributed antenna system company obtained permission to develop a utility-pole based wireless system that will improve wireless coverage for any providers that seek to do so. This positive outcome for the provision of wireless services and for local planning and land use objectives would not have been possible if there were an arbitrary deadline on the permitting of wireless facilities.

In the mid 1990's, open-frame "lattice" towers were the norm, and the new "monopole" design was seen by the industry as an expensive, uncommon alternative. With pressure from communities seeking better visual design, monopoles are now commonplace. Likewise, after the monopole became ordinary, wireless carriers resisted the concealed-antenna monopole, sometimes decorated as a flagpole. With its continuous tubular surface unadorned by exposed antenna hardware, this type of pole (often called a "unipole," "slick-stick," or "flagpole monopole") is now a standard production product of tower manufacturers answering the call for such designs in areas where such a look mitigates objectionable visual impacts. The outdoor distributed antenna system ("DAS"), a technique for using utility poles to provide wireless coverage for numerous providers without resorting to new towers, has captured the interest of residents and land use professionals as a solution for wireless coverage improvement in areas where the conditions are suitable and new towers are not practicable for a variety of reasons. \(^{13}\) Now there are numerous DAS development companies building and operating outdoor DAS

<sup>&</sup>lt;sup>13</sup> cf. Gridcom presentation to the town of Nantucket, Massachusetts, An Introduction to Gridcom and DAS" May 15, 2003, "...addresses community resistance to tall towers in visually sensitive areas" and eliminates the need for "up to 8 new towers" in Nantucket.

networks supporting multiple wireless service providers throughout the nation.<sup>14</sup> With arbitrary permitting deadlines, the give-and-take between the federally-recognized zoning interests and the federally-recognized wireless interests would be lost, and future innovations, such as those described above, will be stifled.

In a river-valley community in hilly territory in New Hampshire, and a separate such community in Massachusetts, applications for prominent wireless towers on ridgetops were rebuffed by the communities, which enabled other useful locations for wireless facilities in their local land use regulations. In the New Hampshire case, a tower company subsequently applied for and obtained permission to erect a wireless tower in the valley and off the ridge to serve the same primary area as would have been served from the ridgetop tower. In the Massachusetts town, the proposed ridgetop tower application was put on hold while the town and the wireless service providers negotiated a mutually agreeable alternative location lower in the valley. In both cases, the review processes that fostered more compatible facility development would have been thwarted by arbitrary permit review deadlines.

Applications for wireless facilities are site-specific, and land-use boards are obliged to perform due diligence on alternative designs and alternative sites for two reasons. First, from a planning and land use perspective, the collective impact of the seemingly never-ending development of new prominent antenna structures in municipalities is a master planning concern with long-term consequences; yet wireless providers tend to look ahead only 12 months or so in their construction plans and coverage designs. Boards, looking at the big picture, must build a record that gives them the facts they need to make reasoned local zoning decisions for the long term despite the lack of long term information from the applicants.

The second reason for boards having to perform due diligence on wireless facility applications is that boards must build a substantive record upon which to base their decisions. At the start of a proceeding boards do not know, *a priori*, whether they will approve, approve with conditions, or deny a permit application; Section (c)(7)(B)(iii) requires a denial to be based on substantial evidence in the written record and supported by a written decision. Consequently, local land use boards tread very carefully in

<sup>&</sup>lt;sup>14</sup> cf. thedasforum.org

building a proper record on all their wireless permit applications. This may require repeated meetings as new facts come to light that require further due diligence.

Because applications for wireless facilities are site-specific and the benefits and detriments of wireless facility placement have broader community impact than just on the site and its neighbors, a single wireless facility application can trigger an area-wide review for the least objectionable ways to implement wireless service improvements. Any action under federal authority that locks in a proposed wireless site, regardless of how objectionable to community norms it may be, denies the community the opportunity to implement due process in determining how wireless facilities are placed. An arbitrary permitting deadline enables wireless facility applicants to gamble on selecting a site of convenience that, by the deadline, becomes the *de facto* site for the facility, regardless of its harmony or lack thereof with the community's zoning objectives.

Based on the foregoing examples, the public permitting process, while at times tedious for both the applicants and the municipalities, is necessarily open-ended. Any application of rigid timetables to the permitting process discourages the congressionally mandated due diligence in building a substantive record, and encourages any unscrupulous applicants to engage in passive or active dilatory tactics to apply further pressure to boards that are already intimidated by the threat of federal litigation.

## **SPEED TO MARKET**

The Petition emphasizes that the speed of wireless deployment was contemplated by Congress as one of the objectives of Section (c)(7),<sup>15</sup> as if this were a material problem eight years after the Telecommunications Act of 1996. Wireless service licensees who are obliged to meet certain build-out benchmarks have been able to do so well ahead of their license deadlines. For example, on April 1, 1999, Omnipoint Communications filed a Required Notification for its Boston PCS license KNLF954 less than two years after the issuance of its license. The Required Notification stated that Omnipoint had successfully provided "adequate service" to more than 33% of the market population. This met the five-year build-out requirement. Further, the reported percentage of population served was 71%, which exceeded the minimum 67% coverage

<sup>&</sup>lt;sup>15</sup> For example, Petition, p.19

to satisfy the ten-year build-out requirement. Thus, in less than two years, Omnipoint was able to meet its licensed ten-year build-out requirement. The Commission's Required Notification records are full of such success stories.

Since 1999, most communities have experienced numerous wireless facility applications, have become aware of the benefits of robust wireless communications, and have become more facile at processing applications. Based on the success of numerous personal wireless service licensees in meeting their build-out objectives handily, Congress was just right in balancing the "two competing aims – to facilitate nationally the growth of wireless telephone service and to maintain substantial local control over the siting of towers." Its concerns that the "inconsistent and, at times, conflicting patchwork" of local regulations potentially affecting speedy deployment of wireless communications that guide municipalities and wireless interests.

Generally, municipal land use boards comprise volunteer members appointed or elected to serve. Their hearing schedules are often very busy, and meetings are held at least monthly, and sometimes biweekly or weekly. When a hearing is continued, most common are monthly continuances from one meeting on an application to the next, due to the schedules of the boards and meeting participants as well as the time required for the applicant to produce a response to the board's inquiries. Such procedures as hiring an expert, scheduling a "balloon test" or "crane test" to simulate tower visibility, seeking further information under NEPA criteria, obtaining signal coverage analysis or real estate analysis of locally preferred alternatives, performing acoustic, soil, structural or other types of engineering analysis, and the like can require more than one month to fulfill. Therefore it is not unusual for a relatively uncontested application to reasonably require more than a half a year to notice, hear, decide, and publish. Challenging proposals that seek numerous exceptions to the rules may demand greater due diligence on the part of the board, as alternatives are explored in what is sometimes an iterative process. Professional planners generally recognize the balance to be struck between enabling

<sup>&</sup>lt;sup>16</sup> Petition, p.18, from Town of Amherst v. Omnipoint Communications Enterprises

<sup>&</sup>lt;sup>17</sup> Petition, p.19 from H.R. Rep. No. 104-204 pt. 1 at 94 (1995)

wireless services with realistic local regulation and managing the community impacts of numerous wireless facilities; they encourage their communities to create flexible wireless rules.

The regulatory burden imposed on municipalities to rush to judgment on wireless facility applications also may come at the expense of the other business of land use boards. Progress on other important land use issues could at times be halted by the burdens of acting quickly and substantively on wireless applications. To further the speed of reviewing applications, municipalities may find that they must request every piece of information imaginable from the applicant, in advance of seeing the application, to be certain that no time is lost asking for data and waiting for the applicant to produce it once the clock has started. This would then pose a burden to applicants that they may not have considered would be the consequence of demanding fast turnaround of all wireless facility applications.

# **FAILURE TO ACT**

If the Commission were inclined to clarify the meaning of a "failure to act," such clarification should not impose a numerical time constraint and instead should impose a qualitative criterion that can be enforced by an aggrieved party in court. Only when a municipality is behaving in an egregious manner that unnecessarily and repeatedly postpones final action should the wireless interests have an opportunity to break the logjam. Such instances are rare.

# **COLLOCATION**

The Petition asks for special treatment for wireless facility collocation applications without defining the term. In my experience, the term "collocation" in this context originated when a wireless tower was occupied only by the one wireless service provider who built it, and communities wanted to ensure that towers are fully utilized by additional providers before approving new tower construction in the same area. Thus, local land use regulations were written to encourage collocation of new wireless service applicants on towers that already had one or more wireless facilities in place.

<sup>&</sup>lt;sup>18</sup> 47 U.S.C. 332(c)(7)(B)(v)

Subsequently, the term had been applied to other places where there was an existing wireless facility, such as a building rooftop. This is the most logical interpretation of a term that means "to place together."

The term "collocation" has in some cases mutated. In a recent dialog with a representative of a wireless industry association, I was informed that the representative felt that the industry defines collocation as the placing of a wireless facility on any existing structure whether or not it has an existing wireless facility upon it, and whether or not the structure was built primarily for the purpose of supporting personal wireless facility antennas. Some local wireless facility regulations reflect this broader interpretation. (I am aware of no formal consensus definition.)

An application for a new tower in northeastern New York state recently exploited the ambiguity of the term "collocation." A tower company applied for a new tower on the proposed site. The co-applicant, a personal wireless service provider, claimed that it would be "collocating" its proposed wireless facility on the proposed tower, absent an existing structure and absent any other wireless service provider being involved. The local zoning law gives special preference to collocation applications. In this case, the local regulation explicitly defines collocation in the traditional manner, obviating the coapplicant's claim.

Without a clear definition of collocation, any Commission action favoring collocation will create a free-for-all of specious "collocation" applications. Further, there are valid reasons for carefully reviewing collocation proposals. Many local regulations encourage collocation at the same time they encourage minimal height and visibility – two competing interests that local boards must weigh. If collocation applications are given an arbitrary preference in their timing, then the consideration of alternative approaches that a community might find less objectionable, in certain cases, will be given short shrift.

In some cases, a collocation may involve replacing or extending a tower to a greater height and girth. Collocation of larger antennas on an available concealed-antenna monopole can require a segment of the continuous tubular surface to be discontinuous and fatter than the rest of the pole. This has been referred to as a "pregnant"

monopole." In some situations, this design may be more objectionable than permitting an alternative, including possibly a second unipole nearby with future collocation capacity.

Some collocations involve adding exposed antennas on open-frame antenna mounts, which may or may not significantly alter the visual character of the structure in its local context. Additional antennas may also increase weight and wind loading on the structure, which has safety implications and implications to the further collocation potential of the structure.

In some situations, the antennas being collocated are not an issue, but the cabling or ground equipment are. Considerations relating to the addition of ground space to an existing facility, particularly in tight quarters, or the addition of a new exposed cable tray on the exterior of a an architecturally significant building may require a board's attention.

In some localities, the presence of antennas on a rooftop identifies that rooftop as a collocation site. In a densely developed residential city north of Boston, local zoning rules require collocation and camouflage where possible. The result is that if the collocation clause is applied strictly to buildings, one row-house among dozens in a few blocks would have to be festooned with numerous faux chimneys to collocate many wireless facilities' antennas. In such a case, it can be less objectionable to a community to favor camouflage and distribution of facilities among several buildings rather than to blindly favor collocation on a single building. Local boards must have an opportunity to balance their collocation requirement against the other objectives of the local regulation.

Based on the great variety of ways in which true collocation is implemented and the term collocation is redefined, local land use boards must consider collocation-oriented applications on a case by case basis, sometimes following the full regimen of reviewing new wireless facilities. It is therefore imprudent to assume that collocation applications necessarily require less due diligence on the part of a land use board than a new wireless facility site. It is also imprudent to assume that collocation proposals are by definition preferable to other approaches in the context of local zoning objectives in all circumstances.

#### **VARIANCES**

The Petition seeks to have the Commission "preempt ordinances that treat every wireless siting request as requiring a variance..." In each state, there are different rules under state law for handling and interpreting variance applications. Action by the Commission on this request puts the Commission in a role for which it is not expert. Without a careful review of the nature of variances in each state, and without a thorough review of how the federal courts in each district have instructed municipalities to handle variance requests, any decision to limit how variances are applied in local zoning matters regarding wireless facilities will be ill-informed. Since such reviews by necessity will require the peeling back of the many layers of land use regulation and require substantial understanding of land use discipline, it puts the Commission in the role of city planner.

Also, many communities have addressed the variance issues, when they come up, in various constructive ways. Some land use boards, recognizing that, for example, any tower over the height limit of a zoning district, requires a variance, have developed a process by which they quickly determine whether it is state variance law or federal prohibition of service law that applies. If state variance law does not apply in the traditional manner, they rely on federal court decisions that direct boards to grant variances under the non-prohibition of service law. Following a prohibition of service review, such boards determine if the proposed facility is necessary. It has become commonplace for such relief to be granted after proper demonstration of need from applicants. The relief is most often written as a variance, despite the fact that many consider it to really be federally mandated relief in lieu of a variance. In fact, the Zoning Board of Appeals in one town in northern Massachusetts determined that a wireless facility variance request was moot because while that board heard variance requests, it was another board that had permit granting authority for wireless facilities. The Zoning Board of Appeals determined that the other board was equipped for wireless facility application review and responsible for town compliance with federal wireless law. The Zoning Board of Appeals instructed the applicant to seek the necessary federal relief with the permit granting board. After a visit to court on the matter, the application was heard and approved by the permit granting board, including relief under the prohibition of service provision of the US Code, without resorting to granting a "variance."

<sup>&</sup>lt;sup>19</sup> Petition, p.35

If the requested exclusion of ordinances that require variances for wireless facility approvals were to be adopted, such an exclusion will be difficult to define. The request involves "any ordinance that automatically requires a wireless carrier to seek a variance, regardless of the type and location of the proposal..."20 yet the Petition gives two examples that do not necessarily automatically require variances. One speaks of a New Hampshire town's ordinance antenna-height requirement that the Petition supposes "could effectively preclude" the provision of service while the other speaks of a Vermont ordinance whose setback requirement "effectively requires" a variance. Without a full analysis of the specific community's terrain and land use characteristics in each case, their criteria may or may not require a variance in all cases. Also, with a focus on a particular type of facility (e.g. a tower company seeking a multi-carrier tower), an applicant may be dismissive of alternatives that may be suitable for the provision of service (e.g. short single-carrier poles just above treetops, the use of existing structures, the use of the public utility infrastructure, and the like). Applicants unwilling to consider alternatives outside of their preferred methods may challenge a local ordinance in court rather than pursue a variance or an alternative implementation in the more apropos venue of the local board. Further, there is no evidence given that all permitting processes have a "variance" process – there may be other methods of providing exceptions to the local land use rules, in which cases the distinction between a permit and a variance-like approval will need to be crystal clear. Regional authorities may have their own overarching land use rules that do not follow the more conventional permit/variance processes in the localities below them.<sup>21</sup> It may not be clear in all circumstances what decision making processes are tantamount to variances and what are less restrictive permitting processes. Indeed, there may be no bright line between the two, which adds regulatory uncertainty rather than eliminating it.

Municipalities are hard-pressed to create master plans that will accommodate facilities within their borders due to the lack of a coherent long term plan from the wireless industry. The use of variances, permits, and other regulatory tools enables a

<sup>&</sup>lt;sup>20</sup> *id.* p.36

<sup>&</sup>lt;sup>21</sup> Consider, for instance, the Cape Cod Commission's rules on Developments of Regional Impact, which do not function under the same rubric as the zoning regulations of the municipalities within their jurisdiction.

community to encourage preferred types of wireless deployment and to adapt to the changing marketplace. It is also a means for showing that it is time to review the local wireless zoning rules when, for example, most applications coming in require variances. By excluding variance-intensive wireless ordinances, the Commission would be putting the onus on municipalities to "read the minds" of the wireless services by always having perfect regulations in place before the arrival of a wireless applicant.

Sometimes despite the best efforts of a community to keep up with wireless siting trends, old regulations become outdated, and the variance process is one way to accommodate new issues. Wireless facility siting being a complex technical, legal and land-use subject, communities that have earnestly generated local wireless laws may not know until it is too late that their good-faith efforts to accommodate new wireless facilities are insufficient. One purpose of a variance procedure is to give parties, including wireless service providers, an opportunity to raise concerns and appeal the rules regarding the permitting of their proposals. By preempting certain situations in which variances are applicable, the Commission would be taking away a key component of the process that provides a balance between land users and land use regulators.

## **CONCLUSION**

We support clarifying who should be eligible for consideration of a gap in service in a specific area— whether it is the first functionally equivalent service, all functionally equivalent services, or any licensed service. Such clarification should be worded precisely to avoid unintended consequences and loophole exploitation.

We are concerned that the imposition of deadlines for zoning review of wireless facilities will be unreasonably arbitrary. At most, a qualitative (not quantitative) definition of "failure to act" could address the Petition's expressed concerns with respect to the few municipalities that may be acting in a less than forthright manner.

Having seen the challenges that municipalities and the industry face in marrying local zoning objectives with the requirement to enable the provision of personal wireless services, the frustration exhibited by the industry in the Petition is equaled by the frustration felt by municipal land use boards and municipal planners who are under the gun to maintain the character of their communities in the face of wireless siting requests

that already bear a hurry-up mentality and bear the threat of federal intervention if they get the process wrong.

With respect to the need for speed, the industry has shown that it can provide a rich, competitive offering nationwide as illustrated by the ability of licensees to handily comply with their licensed build-out requirements and by the continuing growth of the industry and the continuing demand for bandwidth at FCC auction. Zoning review processes are deliberative by nature, and the added pressure of building a substantial record prior to making a decision places demands on the citizen-volunteer boards that can be more onerous than the demands of the more common land use issues they hear. Arbitrary deadlines will only further disadvantage local boards in their efforts to make sound decisions.

No collocation preference should be imposed by the Commission. The creation of any federal preference for "collocation," outside the wording already found in most local zoning rules, is *de facto* zoning regulation because it imposes a preference on communities that already have achieved a balance with other facility siting preferences. Collocation is not always the best thing, or the fastest thing to review.

While it may be tempting to assume that there is a way to identify an ordinance that exclusively requires a variance and to preempt such an ordinance, such a preemption will place local land use regulators at a further unnecessary disadvantage to the wireless development process. Even if there were a way to clearly define an ordinance that exclusively requires variances for wireless facilities, the variance is not such a uniform thing that it a.) is always onerous (which it is not) and b.) can be discarded nationwide with uniform consequences among the 50 states.

Finally, the Petition seems to be focused on municipalities that are seen by the industry as behaving in an obstructive manner. It is requesting broad remedies to address the few while imposing significant further restrictions on the many more communities that in good faith successfully seek to enable the provision of wireless services under local zoning processes. We encourage the Commission to focus strictly on the real cases of municipal intransigence and avoid remedies that would further disadvantage the vast majority of communities that have been successfully acting in good faith.

Respectfully submitted,

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